



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,571	04/30/2001	Yves Schabes	TGS-00201	5344
7590 ATTORNEY/AGENT Choate, Hall & Stewart 53 State Street Exchange Place Boston, MA 02109		06/27/2008	EXAMINER CHOJNACKI, MELLISSA M	
			ART UNIT 2164	PAPER NUMBER
			MAIL DATE 06/27/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/845,571

Applicant(s)

SCHABES, YVES ; ET AL.

Examiner

MELLISSA M. CHOJNACKI

Art Unit

2164

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 32-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 32-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Remarks

1. In response to communications filed on December 17, 2008, claims 1, 35, 37 and 45 have been amended, no new claims have been cancelled or added. Therefore, claims 1-5 and 32-46 are presently pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-11, 14 and 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (U.S. Patent No. 6,665,666).

As to claim 1, Brown et al. teaches a method of answering a question based on information stored on a computer readable medium (See abstract; column 1, lines 22-27) comprising the steps of

parsing a question (See column 3, lines 47-60);

generating an analyzed question (See column 5, lines 7-10; column 11, lines 61-65), including a first identification of a syntactic category assigned to a portion of the parsed question (See *);

identifying at least one predetermined question patterns (See column 2, lines 39-43; column 3, lines 66-67; column 4, lines 1-7) including a second identification of a syntactic category matching the first identification of a syntactic category (See column 1, lines 37-57; column 14, lines 3-48);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

obtaining answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claims 2 and 38, Brown et al., teaches transforming matched question patterns into one or more partially unspecified statements using syntactic frames (See Brown et al., column 1, lines 37-57; column 14, lines 3-48).

As to claims 3 and 39, Brown et al., teaches collecting answers from matching the partially unspecified queries across a plurality of documents in the stored information (See Brown et al., abstract; column 3, lines 48-60).

As to claims 4 and 40, Brown et al. teaches ranking each obtained answer according to its frequency of matching (See Brown et al., column 9, lines 4-10; column 13, lines 11-17).

As to claims 5 and 41, Brown et al. teaches wherein the stored information comprises a set of documents and an index identifying which documents within the set of documents contain terms or groups of terms answering the partially unspecified queries (See Brown et al., abstract; column 1, lines 38-52; column 4, lines 50-53; column 5, lines 33-35, lines 50-57).

As to claims 32, 36, 42 and 46, Brown et al. teaches wherein the partially unspecified statements include at least one syntactic or morphological restriction (See Brown et al., column 1, lines 37-57; column 14, lines 3-48).

As to claims 33 and 43, Brown et al. teaches wherein generating the partially unspecified queries further includes: replacing a generic syntactic or morphological category with one or more corresponding elements from the question (See Brown et al., abstract; column 1, lines 37-57; column 14, lines 3-48); wherein the code that generates

the partially unspecified queries further includes code that: replaces a generic syntactic or morphological category with one or more corresponding elements from the question (See Brown et al., abstract; column 1, lines 37-57; column 14, lines 3-48).

As to claims 34 and 44, Brown et al., teaches wherein a first of the partially unspecified statements is transformed into more than one partially unspecified queries in accordance with a mapping of a question word to more than one corresponding partially unspecified term (See Brown et al., column 3, lines 48-60; column 4, lines 1-13; column 9, lines 38-40); wherein a first of the partially unspecified statements is transformed into more than one partially unspecified queries in accordance with a mapping of a question word to more than one corresponding partially unspecified term (See Brown et al., column 3, lines 48-60; column 4, lines 1-13; column 9, lines 38-40).

As to claim 35, Brown et al., teaches a method of answering a question (See abstract; column 1, lines 22-27) comprising the steps of:
parsing a question (See column 3, lines 47-60);

generating an analyzed question (See column 5, lines 7-10; column 11, lines 61-65), including a first identification of a syntactic category assigned to a portion of the parsed question (See *);

identifying at least one predetermined question patterns (See column 2, lines 39-43; column 3, lines 66-67; column 4, lines 1-7) including a second identification of a

syntactic category matching the first identification of a syntactic category (See column 1, lines 37-57; column 14, lines 3-48);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

generating partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and
obtaining answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claim 37, Brown et al. teaches a computer program product for answering a question comprising code (See abstract; column 1, lines 22-27) that:
parsing a question (See column 3, lines 47-60);

generating an analyzed question (See column 5, lines 7-10; column 11, lines 61-65), including a first identification of a syntactic category assigned to a portion of the parsed question (See *);

identifying at least one predetermined question patterns (See column 2, lines 39-43; column 3, lines 66-67; column 4, lines 1-7) including a second identification of a syntactic category matching the first identification of a syntactic category (See column 1, lines 37-57; column 14, lines 3-48);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

generates partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and
obtains answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

As to claim 45, Brown et al. teaches a computer program product for answering a question based on information stored on a computer-readable medium (See abstract; column 1, lines 22-27) comprising code that:
parsing a question (See column 3, lines 47-60);

generating an analyzed question (See column 5, lines 7-10; column 11, lines 61-65), including a first identification of a syntactic category assigned to a portion of the parsed question (See *);

identifying at least one predetermined question patterns (See column 2, lines 39-43; column 3, lines 66-67; column 4, lines 1-7) including a second identification of a syntactic category matching the first identification of a syntactic category (See column 1, lines 37-57; column 14, lines 3-48);

transforming the one or more identified question patterns into one or more partially unspecified statements the transforming including matching each of the identified question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"), wherein each of the partially unspecified statements is missing a portion corresponding to an answer and the predetermined transformations describe syntactic variations of one or more terms included in the question (See column 1, lines 37-57; column 14, lines 3-48);

transforming the one or more matched question patterns into one or more partially unspecified statements the transforming including matching each of the matched question patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements (See column 3, lines 56-66, where "predetermined transformations" is read on "templates"),

generates partially unspecified queries corresponding to the partially unspecified statements (See column 3, lines 56-66); and

obtains answers by matching the partially unspecified queries to stored information (See abstract; column 3, lines 38-67; column 4, lines 1-13).

Response to Arguments

4. In response to applicants' arguments regarding ***"'666 patent does not teach or suggest transforming one or more identified question patterns into one or more partially unspecified statements, the transforming including matching each of the identified questions into patterns to a set of predetermined transformations corresponding to the one or more partially unspecified statements"***, the arguments have been fully considered but are not found to be persuasive, because Brown '666 discloses "pattern file" (question patterns), which consist of "question templates" (unspecified statements) and replacing it with the associated set of QA-tokens (Predetermined transformations) (See column 3, lines 48-66). Furthermore, column 14, lines 3-48 discloses augmenting during the tokenization process where questions are matched and transformed.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELLISSA M. CHOJNACKI whose telephone number is (571)272-4076. The examiner can normally be reached on 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

June 19, 2008
Mmc

/Charles Rones/
Supervisory Patent Examiner, Art Unit 2164